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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Ingo Zenz

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SAP/BSTZ

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EXAMINER

PARDO, THUY N

ART UNIT

PAPER NUMBER

2168

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/749,957	<b>Applicant(s)</b> ZENZ, INGO	
	<b>Examiner</b> Thuy N. Pardo	<b>Art Unit</b> 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/2/2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 12, 2008 has been entered.

2. Applicant's Amendment filed September 12, 2008 in response to Examiner's Office Action has been reviewed. Claims 1-27 are pending in the application. Claims 1-4, 6, 10, 18-21, 22 and 24 are amended. This Office Action is made Non-Final.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 18 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Brady, Jr. et al. (Hereinafter "Brady"), US Patent Application Publication No. 2006/0010438.

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As to claim 1, Brady teaches the invention substantially as claimed, comprising:

storing a configuration for a distributed environment, which includes a first node [0068; LRU A, LRU B and LRU C's configurations are stored in CPU or management terminal 1100 of fig. 1; see fig. 4b] in a central storage of the distributed environment [a system configuration data file (SCDF) that contains data representing current and previous LRU configurations, 0017; fig. 4b; 0025; 0102; fig. 4b];

updating a portion of the configuration in the distributed environment by the first node [for updating software configurations of line-replaceable unit (LRU), ab; fig. 8-9; then updates in step 3060 a portion of the SCDF with the data of the configuration file CFn, 0099; 5070-5080 of fig. 5; 0101-0109]; and

updating a database at the central storage to reflect modifications of a portion of the configuration [the SCDF is updated with the new record SCDFn at the configuration server wherein the SCDF includes a plurality of records SCDFn respectively corresponding to the plurality of configurable LRUn of the system, 0099-0102; 0017; 3070 of fig. 3b].

As to claims 18 and 25, these claims are corresponding apparatus claims of method claim1 above, therefore, they are rejected under the same rationale. Brady further teaches one server having a memory that maintains a working directory, a storage device that maintains a database a data parser, and a network communication device [0025; 0103; fig. 4b; 0049; 0071], and blocking reads of the configuration from the database during the updating to reflect modifications of the portion of the configuration [ensure that the system remains uniform prior to an initial download, or to block out LRUs that are known to be off line or unavailable. These

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checkboxes could, however, be enabled for selection after a first configuration and download, 0124], and controlling write access to the configuration information by nodes of the distributed environment [the updated SCDF is written to a storage device (e.g., a disc drive, an NVRAM, etc) at the configuration server. The SCDF is preferably restored to RAM of the configuration server upon startup. In an embodiment, all or part of the SCDF may be stored on any of the LRUs 1300 within the system, 0102].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4-6, 10, 11, 17-19, 21, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady, Jr. et al. (Hereinafter “Brady”), US Patent Application Publication No. 2006/0010438 in view of E et al. (Hereinafter “E”), US Patent Application Publication No. 2004/0019639.

As to claim 2, Brady teaches the invention substantially as claimed, with the exception of acquiring a lock for the portion of the configuration in a first node in the distributed environment, modifying the portion of the configuration, invalidating a representation of the

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portion of the configuration in the distributed and releasing the lock although it has the same functionality of updating individual LRU [fig. 5; 0074]. E teaches acquiring a lock for the portion of the configuration in a first node in the distributed environment [locks to multi-threaded processes for portions of the distributed data, ab; lock 114 to primary data portion 210, see fig. 3A-3C of process 106 in the node 150 of fig. 2; 0018-0021; 0036-0051]; modifying the portion of the configuration [modified portion of local data; 0060; 0062; 0071; 0103]; invalidating a representation of the portion of the configuration in the distributed environment [providing locked access to distributed data in a distributed system, 0073; other processes may be prevented from accessing the locked portion, 0042; 500-530 of fig. 6]; and releasing the lock [releases the lock to the distributed store, 530 of fig. 6; ab; 0051]. Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add the feature of E to the system of Brady as an essential means to increase the efficiency of the locking access to distributed data while updating portion of the configuration in the distributed environment.

As to claim 4, Brady and E teach the invention substantially as claimed. E further teaches notifying nodes in the distributed environment of the updated configuration data [notify the local data manager, 0048-0052].

As to claim 5, Brady and E teach the invention substantially as claimed. E further teaches that the lock is cluster wide [locks to processes for portions of primary data while a process holds a lock for a portion of primary data, other processes may not access the locked portion, 0011].

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As to claim 6, Brady and E teach the invention substantially as claimed. E further teaches writing changes to a shared database [update primary data 112 in distributed store 110 of fig. 3C].

As to claim 10, Brady and E teach the invention substantially as claimed. E further notifying registered listeners that the configuration has been changed [a thread requiring access to the distributed data portion may notify the local data manager. The local data manager may increment the count in response to the notification. If a thread finishes accessing the distributed data portion, the thread may notify the local data manager that it has finished. The local data manager may decrement the count in response to the notification that the thread has finished, 0048-0049].

As to claims 11 and 17, these claims are corresponding apparatus claims of claim 1-6 and 10; therefore, they are rejected under the same rationale. E further teaches a instance of a configuration manager [0011; 0034; 0040-0045].

As to claims 18, 19, 21, 22 and 24, all limitations of these claims have been addressed in the analysis 1-6, 10, 11 above, and these claims are rejected on that basis.

1. Claims 7, 8, 12-14, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady, Jr. et al. (Hereinafter “Brady”), US Patent Application Publication No.

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2006/0010438 in view of E et al. (Hereinafter “E”), US Patent Application Publication No.

2004/0019639, and in further view of Vahalia et al. (Hereinafter “Vahalia”) US Patent

Application Publication No. 2005/0251500.

As to claim 7, Brady and E teach the invention substantially as claimed, with the exception of changing a configuration object in a branch of a tree structure although it has the same functionality of obtaining a lock on a portion of an application in a distributed environment. Vahalia teaches changing a configuration object in a branch of a tree structure [see 161-168 of fig. 9; 162-185 of fig. 10; fig. 13-15, 22; 0105; 0111; 0167-0168].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add Vahalia’s features to the Brady-E’s system as an essential means to recognize the location of updated objects in the tree structure to exclusively access to that specified updated object in the file system.

As to claim 8, Brady, E and Vahalia teach the invention substantially as claimed. E further teaches distributed sessions may be distributed among multiple servers, for example in a cluster [0008; 0035], and Vahalia further teaches sending a cache invalidation event to another node in the cluster [0167; 0127-0133].

As to claim 12, Brady, E and Vahalia teach the invention substantially as claimed. Vahalia further teaches a configuration cache [330, 323, 324 of fig. 18] and a configuration handler [0123-0125].



As to claim 13, Brady, E and Vahalia teach the invention substantially as claimed.  
Vahalia further teaches a persistency handler [0123-0125].

As to claim 14, Brady, E and Vahalia teach the invention substantially as claimed.  
Vahalia further teaches a configuration handler to permit access to and modification of the configuration [0123-0125].

As to claim 23, this limitation has been addressed in the analysis of claim 8 above, and this claim is rejected on that basis.

As to claim 27, this limitation has been addressed in the analysis of claims 12-14 and 23 above, and this claim is rejected on that basis.

5. Claims 9, 15, 16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady, Jr. et al. (Hereinafter “Brady”), US Patent Application Publication No. 2006/0010438 in view of E et al. (Hereinafter “E”), US Patent Application Publication No. 2004/0019639 and in further view of Applicant's Admission of Prior art.

As to claim 9, E teaches the invention substantially as claimed, with the exception of a plurality of Java 2 Enterprise Edition (J2EE) although it has the same functionality of using user-specific states including persistent objects that handle to Enterprise Java Bean [see 0008].

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However, the Applicant's Admission of Prior art teaches that in a J2EE environment, the business layer, which handles the core business logic of the application, is comprised of Enterprise Java Bean (EJB") components with support for EJB containers [0007]. It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add this feature to the system of E as an essential means to develop portable, robust, scalable and secure server-side Java applications by building on the solid foundation of Java SE, Java EE provides web services, component model, management, and communications APIs that make it the industry standard for implementing enterprise class service-oriented architecture (SOA) and Web 2.0 applications.

As to claims 15 and 26, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

As to claim 16, Brady, E and Vahalia and Applicant's Admission of Prior art teach the invention substantially as claimed. E further teaches that some of the persistent objects [0034], and Vahalia further teaches caching client attribute data and file attribute data [0066; 0131].

### ***Response to Arguments***

6. Applicant's arguments filed September 12, 2008 have been fully considered but they are not persuasive.

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Applicant argues that Brady does not teach the limitations of independent claims 1 and 18 as amended. In Brady, none of the line replaceable units would update a configuration stored in the central storage.

Examiner respectfully disagrees. All line replaceable units (LRU) would update a configuration stored in the management terminal of the server 1200 of fig. 1. The server receives the configuration files from the respective LRUs in the working directory via FTP, wherein the data parser is operable to update an SCDF stored in the database of the server [see 0025].

Applicant argues that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Brady and E references direct to a distributed data system in an architecture network [see fig. 1 of Brady and fig. 1 of E]. E enhances Brady's system to increase the efficiency of the locking access to distributed data while updating portion of the configuration in the distributed environment [see the abstract of E].

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thuy N. Pardo/  
Primary Examiner, Art Unit 2168